A NEW NAME FOR A STAPELIAD FROM MADAGASCAR

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(With Plate XXXII)

Stapelianthus pilosus (Choux) Lavranos et Hardy nom. nov. Species adhuc pro *Trichocaulon Decaryi* habita, lobis corollae intermediis, lobis coronae exterioris bifidis, erectis, floribus ex basi caulium productis, a *Stapelianthum* pertinet. Nomen, *Stapelianthus Decaryi* prioritatae temporis caret, ergo nomen novum sumendum est.

For some time, the authors of the present article had been puzzled by the classification and relationships of the species described by Professor P. Choux as *Trichocaulon Decaryi* Choux.

This species was discovered in 1931 by R. Decary on the slopes of Mount Angavo in the extreme South of Madagascar. It was from the material collected by Decary that Choux drew up his description which appeared in Annales du Musée Colonial de Marseille, No. 2.10, 1932. The peculiar stems of the species lead Choux to attribute it to the genus *Trichocaulon.*

However, careful consideration of the original description and accompanying photographs made us doubt the correctness of the classification of the species under *Trichocaulon.* In particular, the nature of the stems brings to one's mind not the robust, thorny stems of a member of the Section *Eutrichocaulon*, but rather those of *Huernia Pillansii*, N.E. Br., from which, in fact, they are almost indistinguishable. This alone, coupled with the fact that Choux's species produces its flowers from a peduncle and only from the very base of the stems would, in our view, constitute sufficient reason for a re-classification.

Apart, however, from these characters, the form of the corolla and, especially, of the outer corona with its erect bifid lobes suggested close relationship to *Stapelianthus* Choux, a genus very distinct and endemic to Madagascar.

We have grown and studied the flowers of all but one of the four known species of *Stapelianthus.* Of these, *S. Montagnaci* Bertr. et Boiteau and *S. insignis* Descoigns were not known at the time when Choux described the species under review. A comparison of flowers of these species and of the description by Choux of his Trichocaulon left little doubt in our minds that the re-classification of the species was called for. Efforts, however, to obtain living plants or specimens preserved in liquid remained fruitless.

In early 1960, Prof. Dr. W. Rauh of Heidelberg, Germany, visited Madagascar and succeeded in collecting specimens of Choux's plant in the area of the type locality. These were grown successfully at Heidelberg and at "Les Cèdres", the well-known botanical garden of M. Marnier-Lapostolle in Southern France. Professor Rauh was kind enough to send us live plants, specimens in liquid and the photographs accompanying this text.

It is now possible to examine this species closely. There is no doubt at all that its affinities are not to be sought in *Trichocaulon* but most definitely in *Stapelianthus.* While the stems, as stated, scarcely resemble those of any *Trichocaulon,* the entire floral structure is completely alien to that genus. The flowers of the species herein reviewed are strongly reminiscent of those of *Huernia* and it would belong to that genus were it not for the characteristic outer corona. The manner in which the flowers are borne is equally reminiscent of *Huernia* but entirely unknown in *Trichocaulon.*

The genus *Stapelianthus* Choux was principally based on the form of the outer corona which rises from the staminal column in an erect, five-lobed bowl. The lobes are more or less deeply bifid, adnate at their base to the inner corona-lobes and exceed the staminal column in height. As in the species under review the outer corona has all these characters typical of and peculiar to *Stapelianthus,* it is felt that it must now be transferred to that genus. Unfortunately, as the specific epithet has already been used in *Stapelianthus Decaryi* Choux, it has been necessary to give the species a new name. In view of the peculiar, hairy nature of the stems the above name has been considered appropriate.

The description given below is based on that by Choux, save that it has been amended on the basis of our own observations. It proved necessary to make certain modifications and additions of secondary importance to the original description of the species, particularly in respect of certain measurements, details of the form and colour of the corolla *et al.* In his description Choux states that the colour of the corolla is dark reddish, and he does not mention whether it is spotted. Whether this and certain other differences between his description and our own observations is due to variability of the species, or to the fact that Choux did not have live flowers at his disposal, could not be ascertained.

DESCRIPTION

Plant: succulent, freely branching from the base and forming dense groups.

Stems: erect, 9–12 cm. long (15–20 cm. when growing in deep shade) 8–12 mm. thick, vivid green during the rainy season, otherwise purplish-brown, densely tuberculate; tubercles conical, each tipped with a soft whitish hair about 2·5 mm. long.

Flowers: two or more from the very base of the stems, developed successively.

Pedicel: up to 7 mm. long, 1·5 mm. thick, minutely rugose.

Sepals: subulate, acute, glabrous, 5 mm. long, 1·6–2·00 mm. broad at base.

Corolla: campanulate, fleshy, *ca.* 14 mm. long and 14 mm. broad between apices of lobes, on both sides pale yellow marked with reddish-purple irregular dots, outside glabrous, inside covered throughout with short, cylindrical, pale yellow or reddish-purple papillae not more than $\frac{3}{4}$ mm. long; *tube* 8–8·5 mm. long; *lobes* deltoid, ascending, *ca.* 9 mm. broad at base, 6–7 mm. long, the apices slightly recurved; *intermediate lobes* very short, spreading horizontally.

Outer Corona: cupular, dark reddish-purple, approx. 3 mm. in diameter and 4 mm. high, exceeding the staminal column, the lobes free for about 2·7 mm., deeply bifid.

Inner Corona lobes short, deltoid, dark reddish-purple but with a somewhat lighter spot towards the apex, incumbent at their apices upon the anthers, adnate at their base to the outer corona.

Decary originally found plants of *Stapelianthus pilosus* on the bush clad slopes of Mt. Angavo, north of Ambovombé, in the extreme South of Madagascar. Professor Rauh collected the species in the vicinity of Ambovombé, at an altitude of approx. 300 metres. The plants grew in the shade of rather dense thorn-bush.

While in the characters of its stems *Stapelianthus pilosus* differs from all other known members of the genus, the flowers, in form, texture and colouring are very close indeed to *S. insignis* Descoigns and *S. madagascariensis* Choux.

We are much indebted to:

Prof. Dr. W. Rauh, Director of the Institute for Systematic Botany of the University of Heidelberg, Germany, for living plants, herbarium material, the excellent photographs accompanying this text and for much valuable information without which the present work would not have been possible.

M. H. Rose, of the National Museum of Natural History, Paris, for a copy of Choux's original description in "Annales du Musée Colonial de Marseille".

Dr. R. A. Dyer, Chief, Division of Botany, Pretoria and his Staff for much valuable help and advice, particularly in the matter of renaming the species herein reviewed.

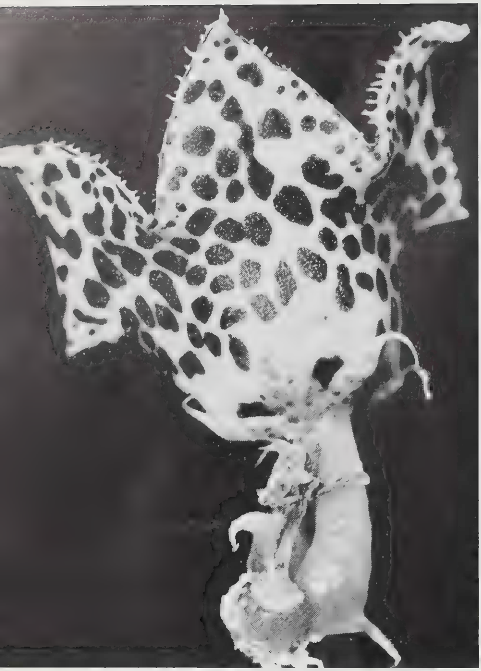

FIG. 1.

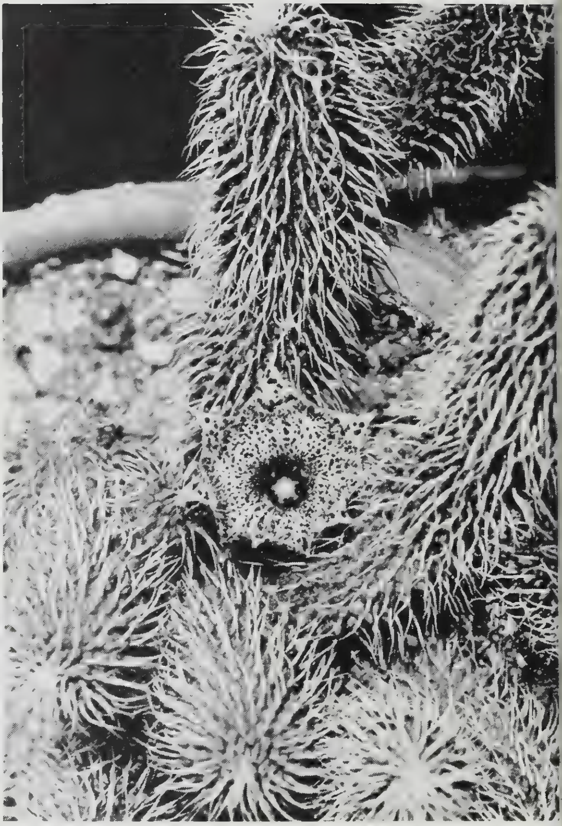

FIG. 2.

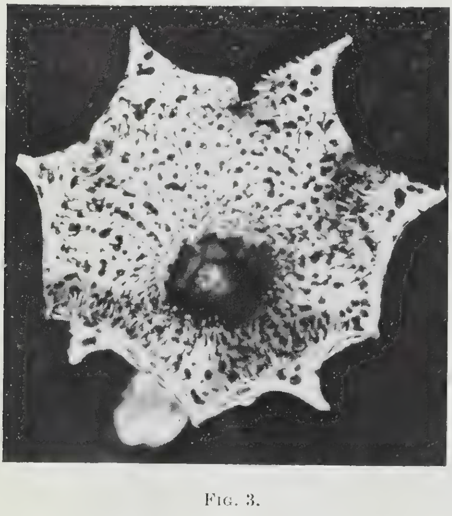

FIG. 3.

PLATE XXXII. *Stapelianthus pilosus* (Choux) Lavranos et Hardy.

FIG. 1.—Flower approx. × 4.

FIG. 2.—Plant with six-lobed flower approx. twice natural size.

FIG. 3.—A six-lobed flower approx. × 4.

(*Photos: Prof. Dr. W. Rauh.*)